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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,721	04/06/2001	Oumar Nabe	17207-00011	6715

7590 10/19/2006  
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EXAMINER

FELTEN, DANIEL S

ART UNIT	PAPER NUMBER
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3693

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/827,721	NABE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Daniel S. Felten	3693	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 7/30/2001 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 3 recites the limitation "expected profit. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 12-14, 18, 22-24 and 31-53 rejected under 35 U.S.C. 102(e) as being anticipated by Galperin et al (US 6.185.543)

Art Unit: 3693

**Re claims 1, 22, 38, 39, 41, 42, 44-45, 47:** Galperin discloses a method using a computer programmed for identifying and retaining customers who are likely to terminate an existing loan contract at an earlier date (*or prepayment of a loan*) (see Galperin, Abstract).

-- Galperin discloses using an early termination model (see col. 3, lines 15-19).

--Notifying the customers of new loan opportunities (see Galperin, col. 2, lines 10-19; col. 3, lines 19-27); and

--cross-selling loans of new loans to the customers (see col. 2, lines 10-19)

**Re claim 2:** the early termination model further comprises utilizing a history of performance and demographic data to predict loan terminations before the customer prepays the existing loan (see Galperin, Abstract; and col. 6, lines 40-60)

**Re claim 12:** A system for identifying and retaining customers who are likely to terminate an existing loan contract at a date earlier than the loan termination date identified in the loan contract comprising:

--a server (42/46)

--a network (28); and

--a computer (20) connected to the server (42/46) via the network; the server (46) is configured to utilize an early termination model to identify customers that will prepay before the end of the termination date of the loan contract (see Galperin, Fig. 2, col. 6, lines 18-67);

--notify those customers of new loan opportunities (see Galperin, col. 2, lines 10-19; col. 3, lines 19-27).

Art Unit: 3693

**Re claim 13:** Wherein said server configured to utilize loan performance and demographic data to predict likely loan termination at least three months before the customer is likely to prepay the existing loan (see Abstract, col. 6, lines 40-60)

**Re claim 23:** a computer programmed to utilize loan performance and demographic data to predict which loan customers are likely to prepay and existing loan (see Abstract, col. 6, lines 40-60).

**Re claim 24:** a computer programmed to prompt a user with a prediction of a probability of early termination at every stage of lifetime of existing loan;

--combine a probability of early termination with financial calculation to determine an expected profit at each stage of the existing loan (see Galperin, col. 6, lines 40-60);

--compare expected profit from the existing loan with an expected profit from a new loan and (see Galperin, col. 6, lines 40-60)

--prompt a user with a determination of customers to target for new loans (see Galperin, col. 6, lines 40-60)

**Re claim 31-36:** a record of customer data;

--a plurality of rules of using the customer data to identify which customers are likely to early terminate a loan contract (see col. 3, lines 10-27); and

--a plurality of rules for using the customer data to identify which customers are likely to early terminate a loan contract (see col. 3, lines 10-27);

--a record of customers identified from said plurality of rules (see col. 3, lines 10-27)

Art Unit: 3693

**Re claim 37:** identifying customers likely to terminate an existing loan contract at a date earlier than the loan termination date identified in the loan contract, said method comprising the steps of:

--selecting, from a electronic interface, a record of customer information (see col. 5, lines 66 to col. 6, line 60);

--selecting, from the electronic interface, an early termination model for an analysis of the selected customer information (see col. 5, lines 66 to col. 6, line 60); and

--requesting, from the electronic interface, a list of customers identified by the model as being likely to early terminate their existing loans . (see col. 5, lines 66 to col. 6, line 60)

**Re claim 40:** selecting a source of customer information from at least one of world wide web, legacy customer data, facsimile, telephone and cellular data (see col. 6, lines 20-24).

**Re claim 43:** means for identifying customers likely to terminate ,an existing loan contract comprises means for using loan performance and demographic data to identify customers likely to early terminate at least three months before the customer is likely to terminate the existing loan (see Galperin, Abstract and col. 6, lines 40-60).

Art Unit: 3693

**Re claim 46 and 53:** means for identifying customers likely to early terminate comprises means for measuring a strength of association between Variables which describe customers and their loans (see Galperin col. 6, lines 40-60; and col. 8, lines 36-49).

**Re claim 48:** A database comprising: --data corresponding to customer information (see col. 6, line 40-60); --data corresponding to rules for using the customer information to identify which customers are likely to early terminate a loan contract; and --data corresponding to customers identified from said data corresponding to the rules (see col. 6, line 40-60);

**Re claim 49:** wherein said data corresponding to rules for using customer information comprises data corresponding to rules for identifying customers likely to early terminate at least three months before the customer is likely to terminate the loan contract (see col. 6, line 40-60);

**Re claim 50:**

data corresponding to rules for predicting a probability of early termination at every stage of an existing loan (see col. 6, line 40-60);

data corresponding to rules for combining the probability of early termination with financial calculations to determine an expected profit at every stage of the loan (see col. 6, line 40-60); and

data corresponding to rules for comparing expected profit from the existing loan to an expected profit from a new loan (see col. 6, line 40-60).

Art Unit: 3693

**Re claim 51:** data corresponding to rules for identifying which customers to target for a new loan based upon expected profits from the existing and the new loans (see col. 6, line 40-60).

**Re claim 52:** wherein said data corresponding to rules for using the customer information further comprises data corresponding to rules for clustering groups of customers according to customer characteristics (see col. 6, line 40-60).

**Re claim 54:** data corresponding to customer information; and at least one rule to be applied to the customer information to identify customers likely to early terminate a loan (see col. 6, line 40-60)

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3-11, 15-17, 19-21, 25-30 and 55-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Galperin et al (US 6, 185, 543)

**Re claims 3-11, 15-17, 19-21, 25-30 and 55-57:** Official Notice is taken of predicting probabilities because such equations would be an obvious alternative and/or extension to the



Art Unit: 3693

models found and/or used in Galperin to predict prepay customers. Thus one of ordinary skill in the art would have sought alternative models to calculate and/or predict customer behavior. Such a modification would be what one of ordinary skill in the art would expect and thus be an obvious expedient well within the ordinary skill of the art.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Felten whose telephone number is (571) 272-6742. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on (571) 272-66712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3693

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Daniel S Felten  
Examiner  
Art Unit 3693

DSF  
9/26/2006